IDENTIFICATION AND INTERPRETATION OF TECTONIC FEATURES FROM ERTS-1 IMAGERY

Monem Abdel-Gawad
Science Center, Rockwell International Corp.
1049 Camino Dos Rios (POB 1085)
Thousand Oaks, CA 91360

August 14, 1973

Type 1 Progress Report for Period June 1 to July 31, 1973

Prepared for

GODDARD SPACE FLIGHT CENTER
Greenbelt, Maryland 20771

by

Monem Abdel-Gawad
Member Technical Staff
Science Center

TYPE 1 PROGRESS REPORT FOR PERIOD JUNE 1 TO JULY 31, 1973

TITLE: Identification and Interpretation of Tectonic Features from ERTS-1 Imagery

NASA Contract No. NAS5-21767

GSFC ID Number: PR001 Dr. Monem Abdel-Gawad, Principal Investigator

Problems: None

Accomplishments:

1) Earthquake epicenters were plotted on grids for the northwestern coastal areas of Mexico along the eastern side of the Gulf of California from Mexicali to Culiacán.

2) Preliminary screening of NW Mexico and Baja California was begun on ERTS imagery.

Significant Results:

1) Several new lineaments or faults have been identified.

2) Study of navigational maps and the ERTS imagery suggests significant mapping errors in the geodetic position of Baja California.

Published Articles: None

Recommendations: No change in plans.

Plans for Next Period: We plan to continue the fault and seismicity studies of NW Mexico and Baja California.

Standing Order Forms: None

Descriptor Forms: None

Retrospective Data Request Forms: None

Practical Applications:

Contacts have been established with Ventura County Planning Commission and the Planning Commission of the City of Thousand Oaks. We have previously reported contacts with Kern County Emergency Services Office. The three organizations are benefiting from an analysis of ERTS imagery in their seismic safety element programs. Of particular importance is the location of suspected faults not previously mapped and plots of earthquake epicenters in imagery overlays.